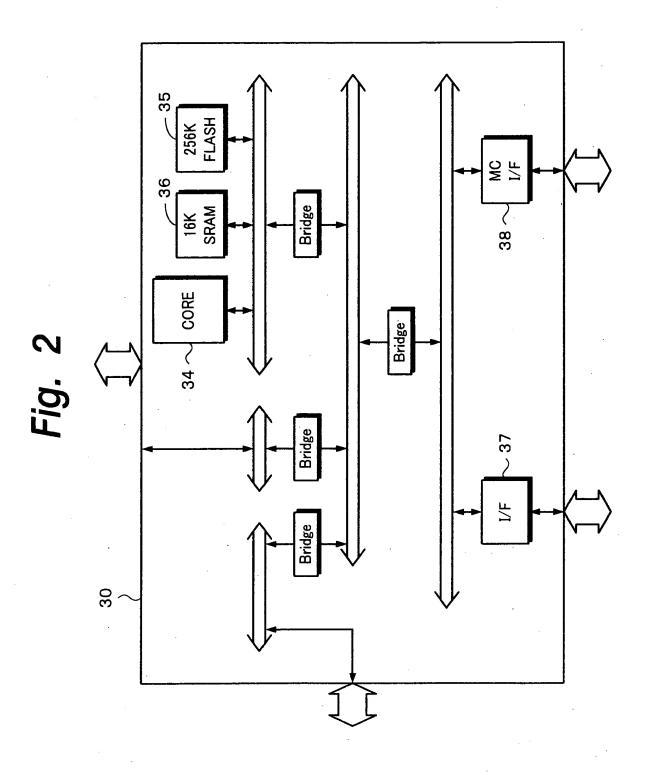
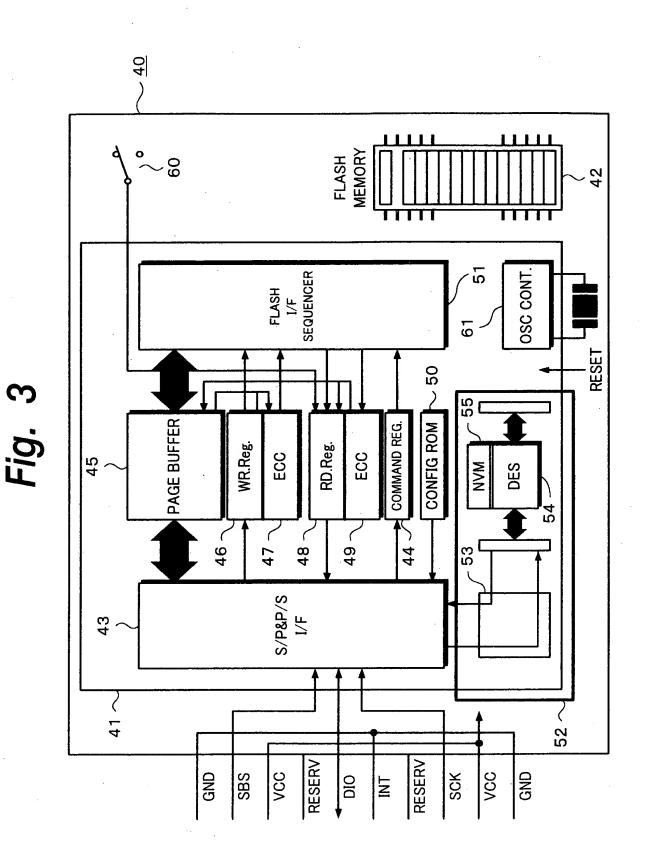


1/33





3/33

APPLICATION PROCESS

FILE MANAGEMENT PROCESS

LOGICAL ADDRESS
MANAGEMENT

PHYSICAL ADDRESS MANAGEMENT

> FLASH MEMORY ACCESS

FILE SYSTEM PROCESS HIERARCHY

Fig. 5

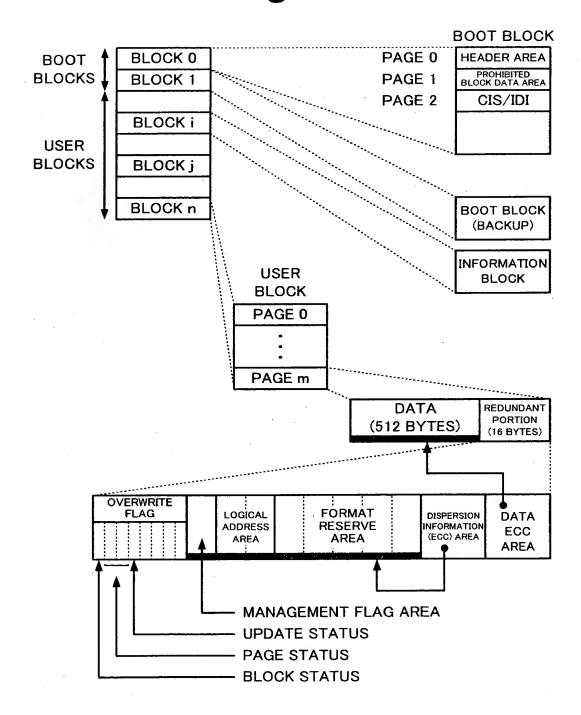
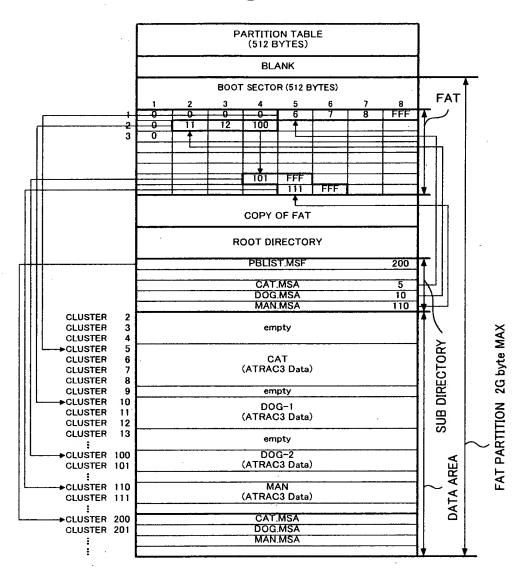


Fig. 6



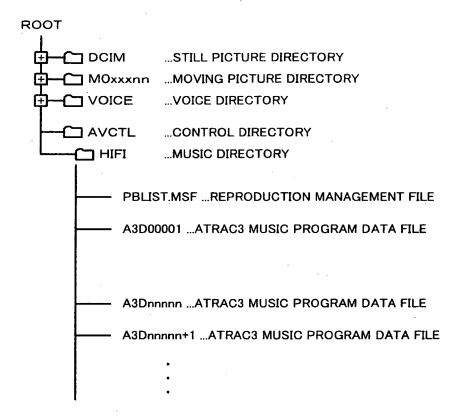


Fig. 8

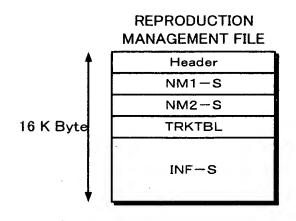


Fig. 9

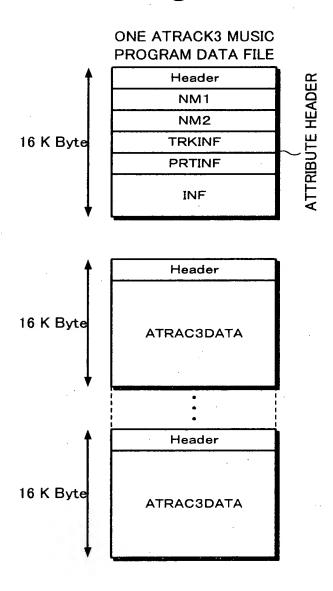


Fig. 10A

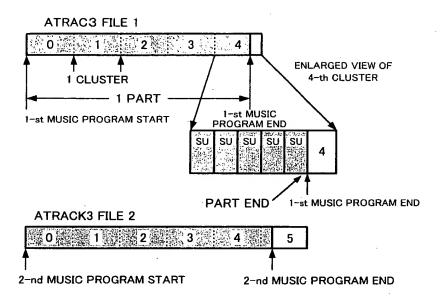


Fig. 10B

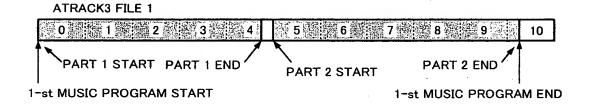
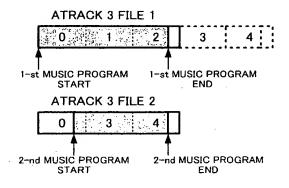


Fig. 10C



REPRODUCTION MANAGEMENT FILE (PBLIST)

LL.			<u> </u>					œ	9		0		П
Ш	ved		·				S-YMDhms	TRK-008	TRK-016		TRK-400		ved
Ω	Reserved	pe l					-YM[20	15		66	1	Reserved
O		Reserved			CONTENTSKEY	Ų	·S	TRK-007	TRK-015		TRK-399		
Ω					NTEN	MAC		900	14		86		
∢	NOIS				00			TRK-006	TRK-014		TRK-398		SION
<u>ග</u>	REVISION							90	13	,	97		REVISION
∞	4	VerNo						TRK-005	TRK-013		TRK-397		
7	Θ	소						04	12		96		0
9	MCode	T-TRK					, ed	TRK-004	TRK-012		TRK-396		MCode
5	_					- (1	Reserved	_			⊢	·	
4	Reserved	SINFSIZE			pe	pe	œ	TRK-003	TRK-011		TRK-395		Reserved
3	_				Reserved	Reserved					\vdash		
5	٦٥	SN2C+L			æ	æ		TRK-002	TRK-010		TRK-394		9
-	BLKID-TL0	S	256)	512)				<u> </u>	\vdash			4720	BLKID-TL0
0	BLKI	SN1C+L	NM1-S(256)	NM2-S(512				TRK-001	TRK-009		TRK-393	INF-S(14720)	BLK
(0000X0	0X0010	0X00X0	0X0120	 0X0320	0x0330		0X0350	.!		0990X0	0X0647	OX3FFO
	O	0	0	0	0	0	,	<u>°</u>		~	° —	0	0
									78	TRKTE			

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•	Fiz	101	0000X0	BLKID-TL0	Reserved	MCode	_	REVISION	Z O		Reserved	P
	<u>.</u>	77 · Si	0X0010	SN1C+L SN2C+L	-L SINFSIZE	T-TRK	<u> </u>	VerNo		Reserved	pə	
			0X0020	NM1-S(256)								
			0X0120	NM2-S(512)				*				
			0X0320		Reserved				CONTE	CONTENTSKEY		
•			0X0330		Reserved				Σ	MAC	:	
-			·		Re	Reserved				-S	S-YMDhms	sw
			0X0350	TRK-001 TRK-002	02 TRK-003	3 TRK-004		TRK-005 T	TRK-006	TRK-007	_	TRK-008
	Fig	Fig 19B	0X0360	0X0360 TRK-009 TRK-010	10 TRK-011	1 TRK-012		TRK-013 T	TRK-014	TRK-015	₩	TRK-016
	5	7										
			0990X0	TRK-393 TRK-394	94 TRK-395	5 TRK-396		TRK-397 T	TRK-398	TRK-399		TRK-400
			0X0670	INF-S(14720)								
			0X3FF0	BLKID-TL0	Reserved	MCode		REVISION	NO		Reserved	p
				0 1 2	3 4 5	2 9	8	6	8	O	۵	EF
				1NF 0x00 1D 0x00	OO SIZE	MCode	C+L	-	Reserved D	DATA VARIABLE LENGTH	RIABLE	LENGT
	Fig	Fig 10C										
	S	7										
			•									

ID		MUSIC INCORMATION		T	LIBI INFORMATION	
RESERVED	ID	MUSIC INFORMATION (CHARACTERS)		ID	URL INFORMATION (WEB INFORMATION)	
2 SUBTITLE VARIABLE 34 SUB TITLE VARIABLE 3 ARTIST VARIABLE 35 ARTIST VARIABLE 4 CONDUCTOR VARIABLE 36 CONDUCTOR VARIABLE 5 ORCHESTRA VARIABLE 37 ORCHESTRA VARIABLE 6 PRODUCER VARIABLE 38 PRODUCER VARIABLE 7 PUBLISHER VARIABLE 39 PUBLISHER VARIABLE 8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE	0	RESERVED		32	RESERVED	
3	1	ALBUM	VARIABLE	33	ALBUM	VARIABLE
4 CONDUCTOR VARIABLE 36 CONDUCTOR VARIABLE 5 ORCHESTRA VARIABLE 37 ORCHESTRA VARIABLE 6 PRODUCER VARIABLE 38 PRODUCER VARIABLE 7 PUBLISHER VARIABLE 39 PUBLISHER VARIABLE 8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 47 ORIGINAL MUSIC PROGRAM SONG WARIABLE VARIABLE 48 ORIGINAL MUSIC PROGRAM SONG WARIABLE VARIABLE 49 ORI	2	SUBTITLE	VARIABLE	34	SUB TITLE	VARIABLE
5 ORCHESTRA VARIABLE 37 ORCHESTRA VARIABLE 6 PRODUCER VARIABLE 38 PRODUCER VARIABLE 7 PUBLISHER VARIABLE 39 PUBLISHER VARIABLE 8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 47 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 48 ORIGINAL MUSIC PROGRAM SONG WRITER VARIABLE 49 ORIGINAL MUSIC PROGRAM SONG WRITER VARIABLE 49 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 4	3	ARTIST	VARIABLE	35	ARTIST	VARIABLE
6 PRODUCER VARIABLE 38 PRODUCER VARIABLE 7 PUBLISHER VARIABLE 39 PUBLISHER VARIABLE 8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 46 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 47 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 47 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 48 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 48 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 49 ORIGINAL MUSIC PROGRAM ITILE VARIABLE 49 ORIGINAL MUSIC PROGRAM ITILE VARIABLE <td< td=""><td>4</td><td>CONDUCTOR</td><td>VARIABLE</td><td>36</td><td>CONDUCTOR</td><td>VARIABLE</td></td<>	4	CONDUCTOR	VARIABLE	36	CONDUCTOR	VARIABLE
7 PUBLISHER VARIABLE 39 PUBLISHER VARIABLE 8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 42 ARRANGER VARIABLE 12 CM VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 47 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 47 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 48 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 48 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 49 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE 49 ORIGINAL MUSIC PROGRAM ITITLE VARIABLE	5	ORCHESTRA	VARIABLE	37	ORCHESTRA	VARIABLE
8 COMPOSER VARIABLE 40 COMPOSER VARIABLE 9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 15 ORIGINAL MUSIC PROGRAM VARIABLE 47 ORIGINAL ALBUM TITLE VARIABLE 16 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 48 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 17 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 49 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 18 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 50 ORIGINAL MUSIC PROGRAM SONG WITTER VARIABLE 19 ORIG	6	PRODUCER	VARIABLE	38	PRODUCER	VARIABLE
9 SONG WRITER VARIABLE 41 SONG WRITER VARIABLE 10 ARRANGER VARIABLE 42 ARRANGER VARIABLE 11 SPONSOR VARIABLE 43 SPONSOR VARIABLE 12 CM VARIABLE 44 CM VARIABLE 13 GUIDE VARIABLE 45 GUIDE VARIABLE 14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 15 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 47 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 17 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 48 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 17 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 49 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 18 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 50 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 19 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 51 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE </td <td>7</td> <td>PUBLISHER</td> <td>VARIABLE</td> <td>39</td> <td>PUBLISHER</td> <td>VARIABLE</td>	7	PUBLISHER	VARIABLE	39	PUBLISHER	VARIABLE
10	8	COMPOSER	VARIABLE	40	COMPOSER	VARIABLE
11	9	SONG WRITER	VARIABLE	41	SONG WRITER	VARIABLE
12	10	ARRANGER	VARIABLE	42	ARRANGER	VARIABLE
13 GUIDE	11	SPONSOR	VARIABLE	43	SPONSOR	VARIABLE
14 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 46 ORIGINAL MUSIC PROGRAM TITLE VARIABLE 15 ORIGINAL ALBUM TITLE VARIABLE 47 ORIGINAL ALBUM TITLE VARIABLE 16 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 48 ORIGINAL MUSIC PROGRAM COMPOSER VARIABLE 17 ORIGINAL MUSIC PROGRAM SONG WITER VARIABLE 49 ORIGINAL MUSIC PROGRAM SONG WRITER VARIABLE 18 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 50 ORIGINAL MUSIC PROGRAM WRITER VARIABLE 19 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 51 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 20 MESSAGE VARIABLE 51 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 21 COMMENT VARIABLE 52 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 22 WARNING VARIABLE 52 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 23 GENRE VARIABLE 54 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 24 56 55	12	СМ	VARIABLE	44	CM	VARIABLE
15	13	GUIDE	VARIABLE	45	GUIDE	VARIABLE
16 ORIGINAL MUSIC PROGRAM COMPOSER COMPOSER VARIABLE 48 ORIGINAL MUSIC PROGRAM COMPOSER COMPOSER VARIABLE 17 ORIGINAL MUSIC PROGRAM SONG WRITER VARIABLE 49 ORIGINAL MUSIC PROGRAM WRITER VARIABLE 18 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 50 ORIGINAL MUSIC PROGRAM ARRANGER VARIABLE 19 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 51 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 20 MESSAGE VARIABLE 52 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 21 COMMENT VARIABLE 52 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 22 WARNING VARIABLE 53 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 23 GENRE VARIABLE 53 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 23 GENRE VARIABLE 54 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 24 COMMENT VARIABLE 55 ORIGINAL MUSIC PROGRAM PERFORMER VARIABLE 25 GENRE VARIABLE <td>14</td> <td>ORIGINAL MUSIC PROGRAM TITLE</td> <td>VARIABLE</td> <td>46</td> <td>ORIGINAL MUSIC PROGRAM TITLE</td> <td>VARIABLE</td>	14	ORIGINAL MUSIC PROGRAM TITLE	VARIABLE	46	ORIGINAL MUSIC PROGRAM TITLE	VARIABLE
10	15	ORIGINAL ALBUM TITLE	VARIABLE	47	ORIGINAL ALBUM TITLE	VARIABLE
17	16		VARIABLE	48		VARIABLE
18	17		VARIABLE	49		VARIABLE
19	18	ARRANGER	VARIABLE	50		VARIABLE
21 COMMENT VARIABLE 53 22 WARNING VARIABLE 54 23 GENRE VARIABLE 55 24 56 56 25 57 57 26 58 59 27 59 59 28 60 60 29 61 62	19		VARIABLE	51		VARIABLE
22 WARNING VARIABLE 54 23 GENRE VARIABLE 55 24 56 57 25 57 58 27 59 59 28 60 60 29 61 62	20	MESSAGE	VARIABLE	52		
23 GENRE VARIABLE 55 24 56 25 57 26 58 27 59 28 60 29 61 30 62	21	COMMENT	VARIABLE	53		
24 56 25 57 26 58 27 59 28 60 29 61 30 62	22	WARNING	VARIABLE	54		
25 57 26 58 27 59 28 60 29 61 30 62	23	GENRE	VARIABLE	55		
26 58 27 59 28 60 29 61 30 62	24			56		
27 59 28 60 29 61 30 62	25			57		
28 60 29 61 30 62	26			58		
29 61 30 62	27			59		
30 62	28			60		
	29			61		
31 63	30			62		
	31			63		

ID	PATH/OTHERS		ID	CONTROL/NUMERIC DATA INFORMATION	
64	RESERVED		96	RESERVED	<u></u>
65	PATH TO VIDEO DATA	VARIABLE	97	ISRC	8
66	PATH TO SONG DATA	VARIABLE	98	TOC ID	8
67	PATH TO MIDI DATA	VARIABLE	99	UPC/JAN	7
68	PATH TO GUIDE DATA	VARIABLE	100	RECORDED DATE (YMDnms)	4
69	PATH TO COMMENT DATA	VARIABLE	101	RELEASED DATE	4
70	PATH TO CM DATA	VARIABLE	102	ORIGINAL MUSIC PROGRAM RELEASED DATE (YMDhms)	4
71	PATH TO FAX DATA	VARIABLE	103	RECORDED DATE (YMDhms)	4
72	PATH TO COMMUNICATION DATA 1	VARIABLE	104	SUB TRACK	4
73	PATH TO COMMUNICATION DATA 2	VARIABLE	105	AVERAGE VOLUME LEVEL	1
74	PATH TO CONTROL DATA	VARIABLE	106	RESUME	4
75			107	REPRODUCTION LOG (YMDhms)	4
76			108	NUMBER OF REPRODUCTION TIMES (FOR LEARNING)	1
77			109	PASSWORD 1	· 16
78			110	APPLevel	16
79			111	GENRE CODE	1
80			112	MIDI DATA	
81			113	THUMB NAIL PHOTOGRAPH DATA	
82			114	TEXT MULTIPLEXED BROADCAST DATA	
83			115	NUMBER OF TOTAL MUSIC PROGRAMS	
84	·		116	SET NUMBER	
85			117	NUMBER OF TOTAL SETS	
86			118	REC POSITION INFORMATION - GPS	VARIABLE
87			119	PB POSITION INFORMATION - GPS	VARIABLE
88			120	REC POSITION INFORMATION - PHS	VARIABLE
89	* *		121	PB POSITION INFORMATION - PHS	VARIABLE
90			122	CONNECTION DESTINATION TELEPHONE NUMBER 1	VARIABLE
91			123	CONNECTION DESTINATION TELEPHONE NUMBER 2	VARIABLE
92			124	INPUT VALUE	VARIABLE
93			125	OUTPUT VALUE	VARIABLE
94			126	PB CONTROL DATA	VARIABLE
95			127	REC CONTROL DATA	VARIABLE

ID	SYNCHRONOUS REPRODUCTION INFORMATION	
128	RESERVED	
129	SYNCHRONOUS REPRODUCTION INFORMATION 1	VARIABLE
130	SYNCHRONOUS REPRODUCTION INFORMATION 2	VARIABLE
131	SYNCHRONOUS REPRODUCTION INFORMATION 3	VARIABLE
132	SYNCHRONOUS REPRODUCTION INFORMATION 4	VARIABLE
133	SYNCHRONOUS REPRODUCTION INFORMATION 5	VARIABLE
134	SYNCHRONOUS REPRODUCTION INFORMATION 6	VARIABLE
135		
136		
137		
138	EMD INFORMATION 1	VARIABLE
139	EMD INFORMATION 2	VARIABLE
140		
141		
142		
143		
144		
145	·	
146		
147		
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157		
158		
159		

Fig. 16A

0	1	2	3	4 5	• ,	8	. •		_	_	-	Ε	F
IN	0x00	ID	0×00	SIZE	Mcode	C+L		Resev	ed	VARIA	BLE L	ENGT	Н

Fig. 16B

ID		ART	TIST	SI	ZE		AS	CII E	NGLI	SH	-	1	DATA	A	
0x69	0x00	3	0x00	0x10	(28)	Мс	ode	0x01	0x09	0x00	0x00	S	I	М	0
N	&	G	R	Α	F	C	N	Κ	E	L	0x00				

Fig. 16C

							ID		ISRC	
SIZE	В	NARY	NOT	SET			0×69	0x00	97	0x00
0x14(20)	Mcode	0x00	0x00	0x00	0x00	ISRC Co	de 8b	yte		
						DATA	-			

Fig. 16D

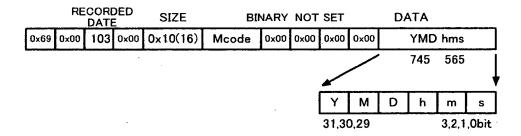
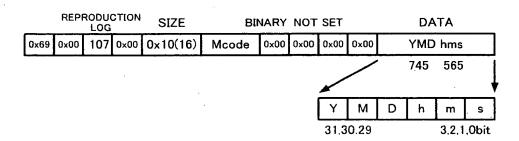


Fig. 16E



A3Dnnnnn.MSA(ATRAC3 DATA FILE)

_	0 1	2	3 4 5		8 9	A	В	C D	Ε	F
0×0000	BLKID	-HD0	Reserved	MCode		eved	В	LOCK :	SERIA	L
0x0010	N1C+L	N2C+L	INFSIZE	T-PRT	T-	-SU		NX	XT	
0x0020	NM1(256)									
				· · · · · · · · · · · · · · · · · · ·						
0x0120	NM2(512)	,					-			
0x0310			•					•		
0x0310		Rese	rved(8)			CON	TENTS	KEY		
0,0020			rved(8)			00.1	MAC	11121		
•				/ed(12)	·		A	LT	FNo) .
	* · · · · · · · · · · · · · · · · · · ·				RIAL-nnn					
0x0360	CONI	MUV	YMDH	ms-S		nms-E	МТ	СТ	CC	N
0x0370	PRTS	SIZE		PRTKI				served		
0x0380			CONI	NUM0	PRTSIZI	E(0x038	8)	PRT		
0x0390				Rese	ved(8)			CONN	UM0	
	INF(0x040	0)								
					4					
0x3FFF	BLKID	-HD0	Reserved	MCode	Res	eved	В	LOCK	SERIA	
0x4000	BLKID		Reserved	MCode		NUM0		LOCK S		
0x4010		BLOC	K SEED		IN	IITILIZA	TION	VECTO	R	
0x4020								141		
			SI	J-000(Nb;	yte=384by	te)				
0x41A0					46.4					
			•	SU-00	(Nbyte)					
0.4000										
0x4320				CII OO	7/Alb\					
				50-00	2(Nbyte)		•			
0x04A0										
0,04,70				SH-04	1(Nbyte)					
0x7DA0				00 04	((toyte)					
0,75,10										
0x7F20			Re	served(Nb	yte=208by	/te)				
		BLOC	K SEED]					
0x7FF0	BLKID		Reserved	MCode	CON	NUM0	В	LOCK S	SERIA	L
					•					

0 1 2 3 4 5 6 7 8 9 A B C D E F

0x0000	BLKID	-HD0	Reserved	MCode	Reseved	BLOCK	SERIAL
0x0010	N1C+L	N2C+L	INFSIZE	T-PRT	T-SU	INX	XT
0x0020	NM1(256))					
0x0120	NM2(512))	-				
		•					
0x0310							

Fig. 19

0×0320	Reser	ved(8)	CONT	ENTSK	ŒΥ	
1	Reser	ved(8)	N	/AC		
I		Reserved(12)		Α	LT	FNo
ſ		MG(D)SE	RIAL-nnn			
0×0360	CONNUM	YMDhms-S	YMDhms-E	MT	СТ	CC CN

Fig. 20

bit7:MODE OF ATRAC3 0:Dual 1:Joint bit6,5,4 N OF 3 BITS:MODE VALUE

N	MODE	TIME	TRANSMISSION RATE	SU	BYTES
7	HQ	47min	176kbps	31SU	512
6		58min	146kbps	38SU	424
5	EX	64min	132kbps	42SU	384
4	SP	81min	105kbps	53SU	304
3		90min	94kbps	59SU	272
2	LP	128min	66kbps	84SU	192
1	mono	181min	47kbps	119SU	136
0	mono	258min	33kbps	169SU	96

bit3:Reserved

bit2:DATA TYPE 0:AUDIO 1:OTHER bit1:REPRODUCTION SKIP 0:NORMAL REP 1:SKIP

bit0:EMPHASIS 0:OFF 1:ON(50/15 μ S)

bit7 :COPY PERMISSION 0:COPY PROHIBITION 1:COPY PERMISSION

bit6 :GENERATION 0:ORIGINAL 1:FIRST OR LATER COPY GENERATION

HCMS bit5-4 :COPY CONTROL FOR HIGH SPEED DIGITAL COPY

00:COPY PROHIBITION 01:COPY FIRST GENERATION 10:COPY PERMISSION COPY OPERATION OF CHILD OF FIRST COPY GENERATION IS PROHIBITED.

bit3-2 MagicGate AUTHENTICATION LEVEL

00:Level10(Non-MG)

01:Level1

10:Level2

11:Reserved

DIVIDE AND COMBINE ARE PROHIBITED IN OTHER THAN LEVEL 10.

bit1,0 Reserved

Fig. 22

0x0370	PRTSIZE	PRTK	EY	Reserved(8)
0x0380		CONNUM0	PRTKEY	
0x0390		Rese	CONNUM0	

0x4000	BLKID-A3D	Reserved	MCode	CONNUM0	BLOCK SERIAL			
0x4010	BLOC	K SEED		INITILIZATION VECTOR				
0x4020								
		SU-000(Nbyte=384byte)						

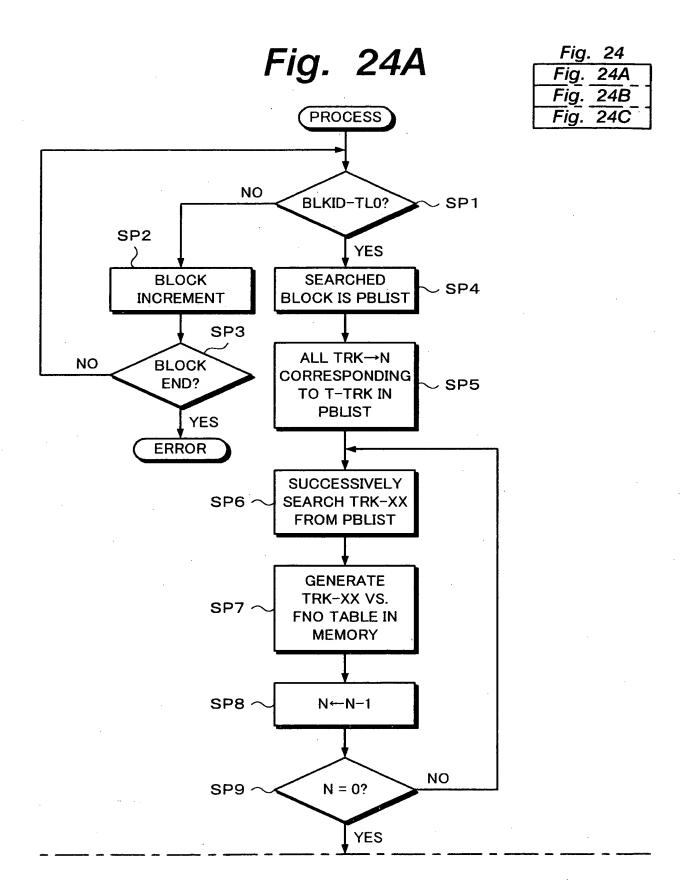


Fig. 24B

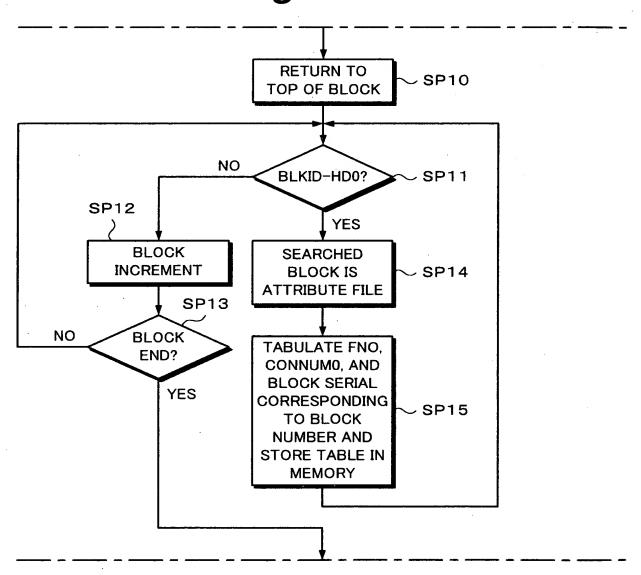
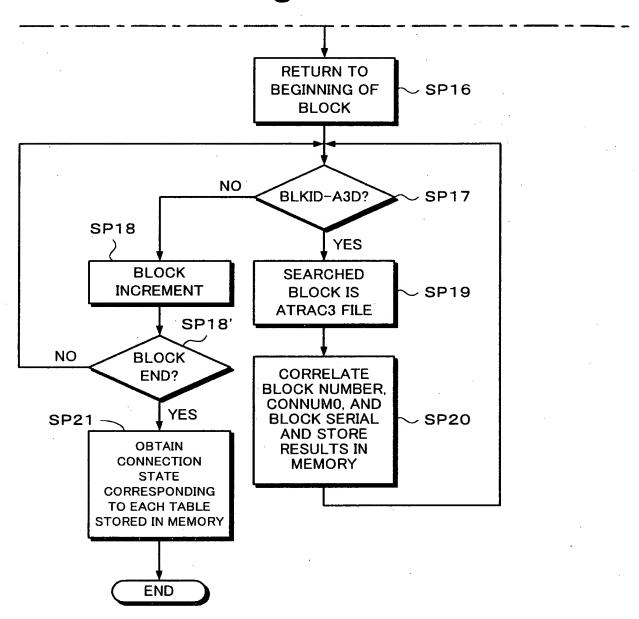


Fig. 24C



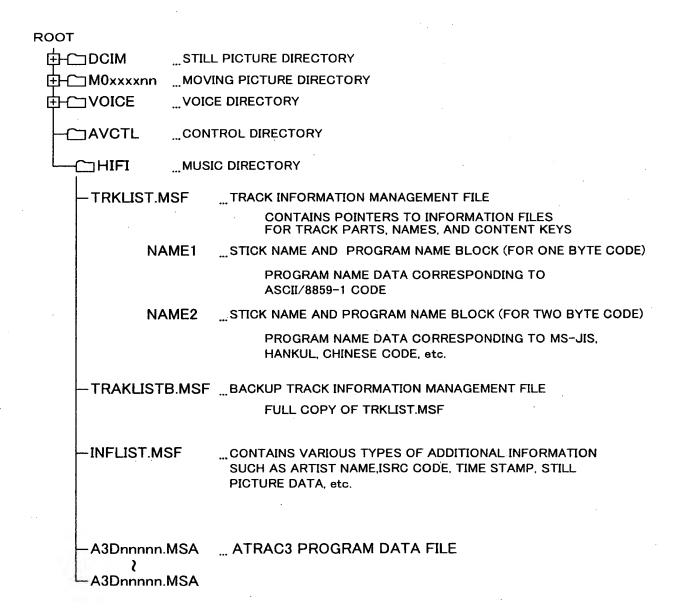
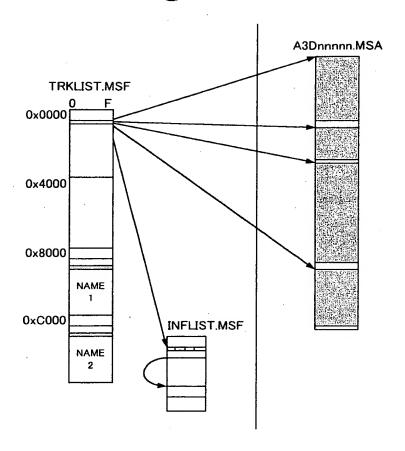


Fig. 26



TRACK INFORMATION MANAGEMENT FILE (TRKLIST.MSF)

	0	1	2	3	4	5	6	7	8	9	Α	В	С	D	Ε	F
0x0000	ВІ	_K [[D-TI	_0	T-1	TRK	МС	ode	F	REVI	SIO	N	Y	'MD	h m	s
0x0010	N1	N2	MS	SID	S-1	ΓRK	РА	SS	AF	ЭP	INF	- -s	S	YMC	hn	ns
0×0020	020 TRKINF-001							,,								
							PF	RTIN	F-0	01						
				-			TF	RKIN	F-0	02						
							PF	RTIN	F-0	02						
•								(,							
								•								
0x3FF0	Вι	_K IE)–Tl	_0			МС	ode	F	REVI	SIO	N				
0×4000	Вι	_K IE)–Tl	_1	MCode REVISION											
								()							
				DE	TAIL	OF	TRI	KINF	-nn	ın/P	RTI	NF-ı	าทท			
	0	1	2	3	4	5	6	7	8	9	Α	В	С	D	Ε	F
	то	LT	IN	F	F	NM	-nnr	ו		CC	NTI	ENT	S KE	Y-n	nn	
	-nnn				MG(D) SE				ERIAL-nnn							
	P	PP.	CTI	-	СО	NNL	JM−r	าทท	P-ı	nnn	×	Т		INX-	nnn	
	YMDhms-S			S	Υ	MDh	ıms-	E	MT CT CC CN Reserved							
	PR A-0000				PR	rsiz	E-0	000	PRTKEY-0000							
	٠							(· 							
	PR		A-n	nnn	PR	ΓSΙΖ	E-n	nnn		·	PR	TKE	Y−nı	nnn	·····	
0x7FF0	ВΙ	_K I)-Tl	_1			MC	ode	F	REVI	SIO	N				

Fig. 28

STICK NAME AND PROGRAM NAME BLOCK-FOR ONE BYTE CODE

	0	1	2	3	4	5	6	7
0x8000		BLK I	D-NM1			ode		
0×8008		PNN	11-S			PNM	1-001	
0x8010		PNM	1-002			PNM	1-003	
				(<u> </u>			
0×8668		PNM	1-408		NM1	- S		
			NM1-0	-				
			NM1-C					
			5					ļ
0xBFF0			NM1-4	808		G		
0xBFF8		BLK IC	D-NM1				MC	ode

Fig. 29

STICK NAME AND PROGRAM NAME BLOCK-FOR TWO-BYTE CODE

	0	1	2	3	4	5	6	7
0xC000	×	BLK I	-NM2				МС	ode
0xC008		PNM	12-S			PNM	2-001	
0xC010		PNM2	2-002			PNM	2-003	
					5			
0xC668		PNM2	2-408		NM2	?-S		I
			NM2-(NM2-(NM2-(\	002				
			NM2-	408				
0xFFF0					·			
0xFFF8		BLK I	NM2				МС	ode

ATRAC3 DATA FILE (A3Dnnnnn.MSA) · · · 1 SoundUnit=N BYTES

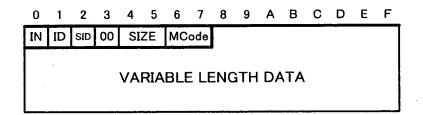
	0	1	2	3	4	5	6	7				
0x0000	BLK ID-A3D MCod											
0x0008		BLOCK SEED										
0x0010		CONNUMO BLOCK SERIAL										
0x0018		INITILIZATION VECTOR										
0×0020			,	su-000	(N byte)							
0×0020 +N/8			,	SU-001	(N byte)	l						
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SU-002	(N byte)							
				(, >							
			•	•								
			•									
			SI	J-(nnn-1) (N byt	е)						
0x3FF0 -N/8												
IV/ C			R	Reserved	(M byte	·)		٠.				
0x3FF0				BLOCK	SEED		:					
0×3FF8		BLK IC)-A3D				МС	ode				

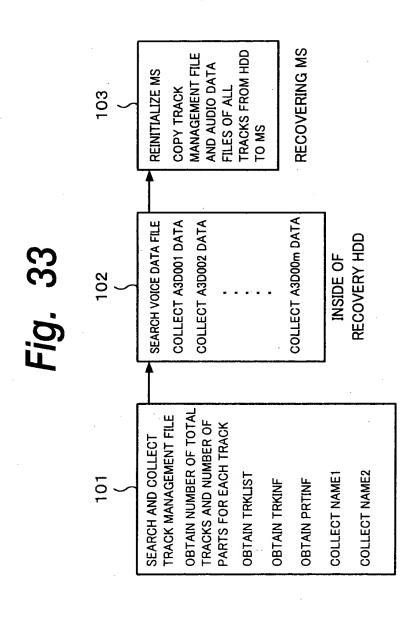
ADDITIONAL INFORMATION MANAGEMENT FILE (INFLIST.MSF)

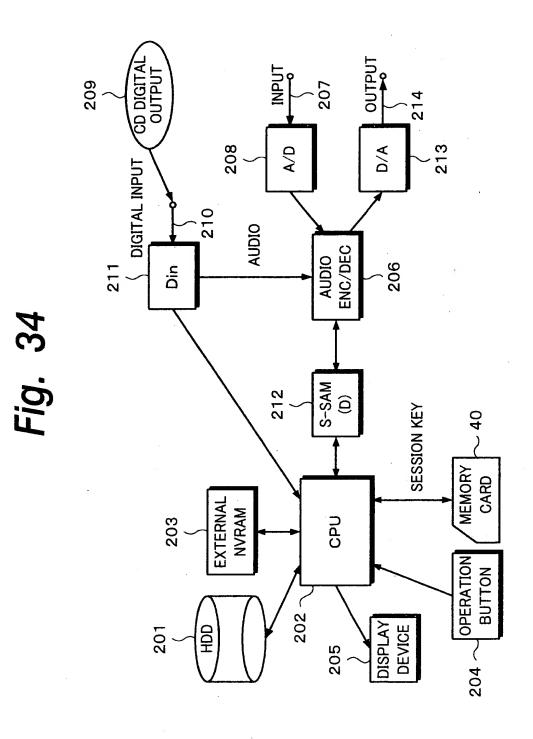
	0 1 2	3 4 5 6	7 8 9 A E	3 C D E F					
0x0000	BLK ID-INF	T-DAT MCode	YMDhms	INF-409					
0x0010	INF-001	INF-002	INF-003	INF-004					
0x0020	INF-005	INF-006	INF-007	INF-008					
	5	ς	5	5					
0x0660	INF-405	INF-406	INF-407	INF-408					
0x07F0	Reserved								
0x0800	DataSlot-0000								
0x0810	DataSlot-0001								
	,								
)								
0x3FF0	DataSlot-03 7F(895dec)								
0×4000	DataSlot-03 8 0								
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \								
į	DataSlot-FFFF (MAXIMUM VALUE)								

Fig. 32

ADDITIONAL INFORMATION DATA STRUCTURE

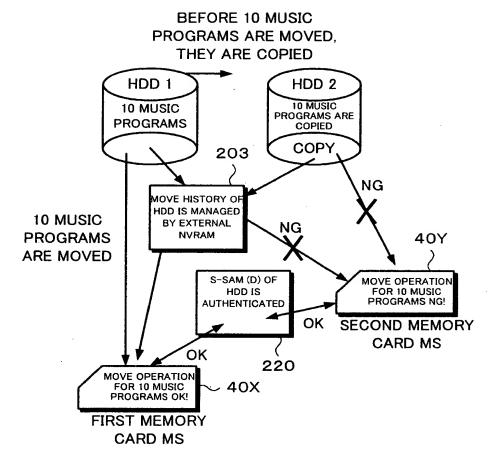




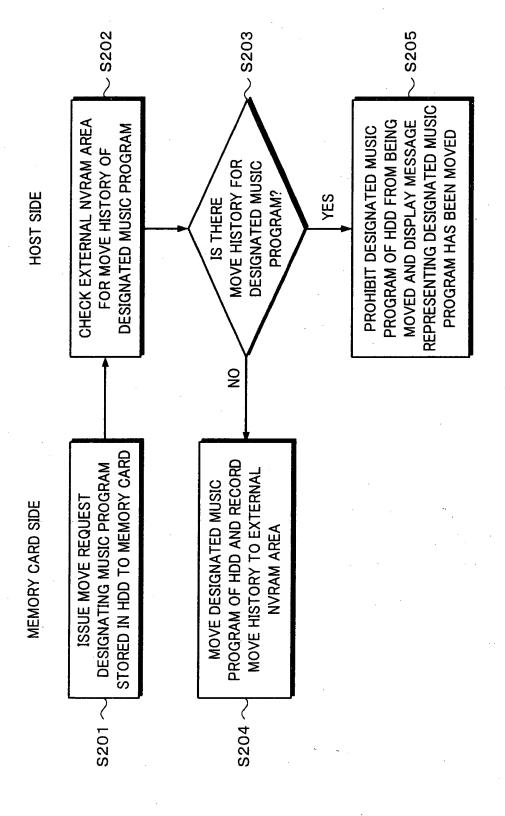


유 201 $\sim 212e$ → Kstd 212b DES(Kstd,CK) ATRAC3 DATA ENCRYPTING DEVICE **ENCRYPTING DEVICE** ENCRYPTING DEVICE STORAGE KEY **CONTENTS KEY** ENCRYPTED ENCRYPTED 216 -**DECRYPTED ATRAC3 DATA** DATA DATA HOST SIDE ~ 212a Fig. 35 SeK **CONTENTS KEY ENCRYPTING DEVICE** SESSION KEY **CONTENTS KEY** AUDIO ENC/DEC S-SAM(D) 212d \ \ \ \ 206 ATRAC3 DATA ENCRYPTED AUTHENTICATING 215 OPERATION MEMORY CARD SIDE MEMORY CARD STORAGE KEY INPUT INPUT DATA SESSION KEY S = SAM (M)CONTENTS KEY SeK Kstm ${\sim}$ 40

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10	AUDIO ENCODER/DECODER IC
20	SECURITY IC
30	DSP
40	MEMORY CARD
42	FLASH MEMORY
52	SECURITY BLOCK
PBLIST	REPRODUCTION MANAGEMENT FILE
TRKLIST	TRACK INFORMATION MANAGEMENT FILE
INFLIST	ADDITIONAL INFORMATION MANAGEMENT FILE
A3Dnnn	AUDIO DATA FILE